

June 22, 2021

Grafton Planning Board Grafton Municipal Center 30 Providence Road Grafton, MA 01519 Grafton Conservation Commission
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Subject:

109 Creeper Hill Road Site Plan Review

Grafton Wetlands Regulations and Stormwater Regulations Review

Dear Planning Board Members and Conservation Commissioners:

We received the following documents in our office on May 12, 2021:

- Plans entitled 109 Creeper Hill Road, Grafton, MA dated April 22, 2021, prepared by Asa Engineering for Waste to Feed, Inc. (2 sheets)
- Bound document entitled <u>Stormwater Management Report, 109 Creeper Hill Road, Grafton, MA</u>, dated April 26, 2021, prepared by Asa Engineering for Waste to Feed, Inc.
- Correspondence from Feedback Earth, Inc to Grafton Planning Department dated April 28, 2021 re: Application for Modification of a Special Permit and Site Plan Approval at 109 Creeper Hill Road.
- Unsigned "Application for Modification of a Special Permit & Site Plan Approval" for property at 109 Creeper Hill Road.

We also received the following documents in our office on May 19, 2021 via e-mail:

Plans entitled <u>109 Creeper Hill Road, Grafton, MA</u> dated April 22, 2021, and revised May 5, 2021, prepared by Asa Engineering for Waste to Feed, Inc. (2 sheets)

We also downloaded the following documents from the Grafton Conservation Commission's website on June 21, 2021:

- Plans entitled <u>109 Creeper Hill Road, Grafton, MA</u> dated April 22, 2021 and last revised June 2, 2021, prepared by Asa Engineering for Waste to Feed, Inc. (2 sheets)
- MassDEP "Checklist for Stormwater Report."

On behalf of the Grafton Planning Board, Graves Engineering, Inc. (GEI) has been requested to review the documents submitted and comment on their compliance with <u>Grafton Zoning By-law</u> with amendments through June 20, 2020; Massachusetts Department of Environmental Protection (MassDEP) Stormwater Handbook, and standard engineering practices. GEI was authorized to proceed with this review on June 9, 2021. Also, on behalf of the Grafton Conservation Commission GEI has been requested to review and comment on the plans' and supporting documents' conformance with applicable Town of Grafton Regulations for the

Administration of the Wetlands Bylaw and Town of Grafton Regulations Governing Stormwater Management.

Our comments follow:

Zoning By-Law

- 1. The name (Feedback Earth, Inc.) and address of the applicant needs to be provided on the plans. (§1.3.3.3.d.1)
- 2. The name and address of the subject parcel's owner needs to be provided on the plans. (§1.3.3.3.d.2 & §1.3.3.3.d.9)
- 3. Proposed utilities are not shown for the proposed building addition. The applicant should explain or show on the plans how utilities (e.g. electric) will be routed to the building addition. (§1.3.3.3.d.28)
- 4. The height of the proposed building is missing from zoning information table on Sheet 2. On Sheet 2, construction note #9 indicates that the height of the proposed building shall be in conformance with the bylaws. Per the bylaw, the maximum height is 35 feet.
- 5. GEI has no issues with the location of the proposed building addition nor with on-site traffic circulation.

Regulations for the Administration of the Wetlands Bylaw

6. GEI has no issues relative to compliance with the <u>Regulations for the Administration of the Wetlands Bylaw.</u>

Grafton Stormwater Management Regulations

- 7. The precipitation amounts used in the hydrology computations need to be derived from NRCC Cornell data. (§6.B.3.b)
- 8. The plans were prepared using two-foot contour intervals instead of one-foot contour intervals. Nevertheless, GEI was able to readily follow the site's topography. GEI defers to the Conservation Commission whether the two-foot contour intervals are acceptable. (§7.B.1.h)

Hydrology & MassDEP Stormwater Management

9. Information in the hydrology computations and on the plans needs to be coordinated relative to the subsurface infiltration system. The hydrology computations modeled a stone envelope height of 4.40 feet, but Sheet 2 of the plans shows a 3.55-foot stone height (six inches of stone under and over the chambers plus the chamber height). The hydrology computations modeled 77 chambers (each row would be six chambers long at 7.00 feet per chamber plus end caps – approximately 44 feet total) by 13 rows of chambers wide (64.3 feet wide) accounting for an overall chamber width of 52" (4.33 feet) plus six inches of stone between rows plus one foot of stone around the perimeter. The plans call for the infiltration system to be 44 feet by 47 feet and the hydrology computations modeled the infiltration system to be 44 feet by 43 feet, but to accommodate 77 (or 78) chambers the infiltration system would have

to be approximately 46 feet long (allowing for one foot of stone at the ends of the row) by 64.3 feet wide.

- 10. For the record, the plans and Stormwater Management Report need to include soil testing information associated with the subsurface infiltration system. On October 1, 2015 GEI witnessed soil testing at the then-proposed location of a subsurface infiltration system. The new infiltration system is proposed essentially at the same location as the system that was proposed in 2015.
- 11. The Operation and Maintenance Plan needs to replace the former owner's name (Troiano Trucking) with the new owner's name.

General Engineering Comments

- 12. The plans should include a construction detail for the proposed concrete pad.
- 13. The proposed roof downspout leaders should be drawn on the plans to depict how the downspouts will connect to the infiltration chambers.
- 14. On Sheet 2, the "zoom detail" of the inspection port for the Cultec structures should be increased in size for clarity, and the word "optional" at the leader note for the inspection ports needs to be removed from the profile view (inspection ports are required).

General Comments

15. On Sheet 1, it is confusing whether the existing foundations of Building 4 and Building 5 are to be left in place or removed – the leader notes state "existing superstructure to be removed" and "existing above ground framing to be removed" but the layout on Sheet 2 suggests that the foundations would also be removed, with a new foundation constructed for the building addition.

We trust this letter addresses your review requirements. Feel free to contact this office if you have any questions or comments.

Very truly yours,

Graves Engineering, Inc.

Jeffrey M. Walsh, P.E.

Principal

cc: David Janicek; Feedback Earth, Inc. Mahmood Azizi, P.E.; ASA Engineering Jaclyn Caceci, P.E.; Tighe & Bond